Applicant : Scott D. Cohen, et al.   Attorney's Docket No.: 07844-625001 / P578
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REMARKS

Claims 1-33 were pending as of the action mailed on January 12, 2007. Claims 1, 3-17, and 19-33 are currently amended. Claims 2 and 18 are cancelled. No new matter has been added.

Reexamination and reconsideration of the action are requested in light of the foregoing amendments and the following remarks.

Section 112 Rejections

Claims 4, 7, 12, 15-16, and 18-32 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The applicant has amended claims 4, 7, 12, 15-16, and 18-32 for clarity. The applicant respectfully submits that the § 112 rejections have been overcome and requests that they be withdrawn.

Section 102 Rejections

Claims 1-7 and 10 are rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Takahashi (U.S. Patent No. 6,665,439).

Claim 1, as amended, recites identifying a plurality of edge pixels in the image based on a respective gradient value associated with each of the plurality of edge pixels.

In rejecting claim 1, the examiner asserts that Takahashi discloses "identifying a plurality of edge pixels (edge image, column 12, line 54) in the image."

The applicant disagrees. The cited portion of Takahashi states (*emphasis added*):

> The image recognition processing section 2 applies <u>edge detection to this image</u>, to thereby obtain an edge image as shown in the lower part of FIG. 4, which is stored in the shape data storage section 3. The edge image is a bi-level image, i.e., the black lines in the lower part of FIG. 4 correspond to pixels which are situated along the edges of objects which appear in the original color image, while the white portions correspond to pixels which do not correspond to edges. [col. 12, lines 50-58]

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The portions of Takahashi relied upon by the examiner disclose only that edges are detected, not the technique by which edge detection is achieved. In fact, Takahashi subsequently discloses that edges are detected using a series of edge templates (*see* FIG. 6 and col. 13, line 16 to col. 14, line 9), rather than by a gradient value, as recited in claim 1.

Additionally, claim 1, as amended, incorporates some of the features of claim 3. In rejecting claim 3, the examiner asserts that Takahashi discloses, "identifying a plurality of edge pixels includes computing a gradient value for each of a plurality of pixels in the image (detect the color change between two objects, column 12, lines 61-63)" (*emphasis added*).

The applicant disagrees. The cited portion of Takahashi reads as follows (*emphasis added*):

> Basically, the edge detection that is executed by the image recognition processing section 2 serves to detect the change between the color of the road 40 and the color of adjacent areas, and between the color of the building 41 and the color of adjacent areas, and to judge that each position where the amount of such change is large corresponds to the position of an edge. [col. 12, lines 59-65]

This portion of Takahashi relied upon by the examiner discloses an abstract description of the result of image recognition processing. The cited portion of Takahashi does not disclose how the edges in the image are detected or how to detect change of color. In fact, as set forth above, Takahashi compares a pixel to a series of edge templates rather than use a gradient value of a pixel. Takahashi does not disclose or suggest identifying edge pixels based on a respective gradient value associated with each of the edge pixels, as recited in claim 1.

For at least the above reasons, the applicant respectfully submits that claim 1, and claims 3-16, which depend from claim 1, are in condition for allowance.

Section 103 Rejections

Claims 9, 17, and 33 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Takahashi in view of Prakash (U.S. Patent No. 6,778,698).

Claim 9 depends on claim 1, which recites identifying a plurality of edge pixels in the image based on a respective gradient value associated with each of the plurality of edge pixels.

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In rejecting claim 9, the examiner relies upon the following portions of Prakash, "conversely, another class of region-based approaches starts with the entire image and attempts to split the image into multiple homogeneous regions" (col. 3, lines 36-38). However, the portions of Prakash relied upon by the examiner, either alone or in combination with Takahashi, do not disclose or suggest identifying a plurality of edge pixels in the image based on a respective gradient value associated with each of the plurality of edge pixels, as recited in claim 1. For at least these reasons and the reasons set forth in reference to claim 1, the applicant respectfully submits that claim 9 is in condition for allowance.

Claim 17 is directed to a program product and corresponds to claim 1. In rejecting claim 17, the examiner asserts that:

> Prakash teaches a computer program product stored on computer-readable medium (116, see Fig 2) comprising instructions (program instructions (see Fig 2) and executed by programmable processor (114, see Fig 2).

The examiner rejects the remaining features of claim 17 over Takahashi for the same reasons as claim 1. As set forth above in reference to claim 1, Takahashi does not disclose or suggest the identifying a plurality of edge pixels based on respective gradient values associated with each edge pixel, as recited in claim 17. Notwithstanding Prakash's disclosure regarding computer program products, the portions of Prakash relied upon by the examiner fail to overcome the deficiencies of Takahashi. The portions of Prakash and Takahashi, alone or in combination, do not disclose or suggest the features of claim 17.

The applicant respectfully submits that claim 17, and claims 19-32 which depend from claim 17, are in condition for allowance.

Claim 33, as amended, recites generating an edge pixel map of the image based on a respective gradient value associated with each pixel in the scanned image. In rejecting claim 33, the examiner relies upon the rejection of claim 1 and 17. As set forth in reference to claim 17, the portions of Prakash and Takahashi, either alone or in combination, do disclose or suggest using a respective gradient value of an edge pixel. It follows therefore that neither Prakash nor Takahashi disclose or suggest generating an edge pixel map of the image based on a respective gradient value associated with each pixel in the scanned image, as recited in claim 33.

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For at least the above reasons, and the reasons set forth in reference to claim 1, the applicant respectfully submits that claim 33 is in condition for allowance.

Claims 15-16 and 18-32 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Takahashi in view of Huang and Noda and in further view of Curtright (U.S. Patent No. 5,844,570).

Claim 15, as amended, recites that prior to cropping all the defined cropping areas, two of the two or more defined cropping areas are merged into a single defined cropping area in response to user input.

The examiner acknowledges that Takahashi, Huang, and Noda fail to disclose a method for merging two cropping areas into a single cropping area. Instead, the examiner asserts that "Curtright discloses a method for generating digital map that includes merging two cropping areas into a single cropping area (column 6, lines 15-20)." The applicant disagrees.

The portion of Curtright relied upon by the examiner state (*emphasis added*):

> [e]ach of these partial section initially is scanned in as bit mapped map images. Portions of the desired map image are then separately cropped from the bit mapped map images. The two cropped portions are then merged into a single map image, which is edited in the manner described above. [col. 6, lines 15-20]

Curtright discloses that portions of an image are first cropped separately and then subsequently, after being cropped, the portions are merged together. In contrast claim 15 recites that defined cropping areas are merged before the cropping occurs. Thus, Curtright does not disclose or suggest merging two or more defined cropping areas prior to cropping all the defined cropping areas, as recited in claim 15.

The applicant further notes that claim 15 depends from claim 1, and so for at least these reasons and the reasons set forth in reference to claim 1, the applicant respectfully submits that claim 15 is in condition for allowance.

Claim 16. In rejecting claim 16 the examiner acknowledges that "Curtright does not expressly disclose the method wherein adjusting one or more of the defined cropping areas includes splitting a single cropping area into two or more cropping areas." The examiner goes

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on to immediately conclude that "it would have been obvious to split a single cropping area into two or more cropping areas so that if two cropped area are identified as one, the area would be split into two or more before performing the crop operation." The examiner, however, has failed to provide any basis for this conclusion of obviousness. The applicant respectfully submits that such a conclusory statement, without more, cannot support the rejection of claim 16 under 35 U.S.C. § 103(a).

In any case, the applicant notes that claim 16 depends on claim 1 and so, for at least these reasons and the reasons set forth in reference to claim 1, the applicant respectfully submits that claim 16 is in condition for allowance.

Conclusion

The applicant respectfully requests reconsideration and allowance in view of the amendment and remarks.

By responding in the foregoing remarks only to particular positions taken by the examiner, the applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, the applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

Please apply any charges or credits to deposit account 06-1050 (Ref. 07844-625001).

Respectfully submitted,
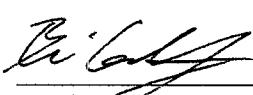
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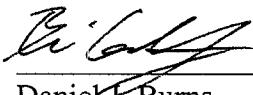
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